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09/229,046	01/12/1999	MICHAEL G. COUTTS	7890	7721
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MICHAEL CHAN NCR CORPORATION 1700 SOUTH PATTERSON BLVD DAYTON, OH 45479-0001			EXAMINER TSEGAYE, SABA	
			ART UNIT 2616	PAPER NUMBER

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/229,046

Applicant(s)

COUTTS ET AL.

Examiner

Saba Tsegaye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11,12,32-34,74,81,83-90,98-103,105-114,119-140 and 148-179 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 148-156,162-170,178 and 179 is/are allowed.
- 6) ☒ Claim(s) 11,12,32-34,74,81,83-90,95,98-103,105-114,119-140,157-161 and 171-177 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is in response to the amendment filed 11/30/05. Claims 11, 12, 32-34, 74, 81, 83-90, 95, 98-103, 105-114, 119-140, and 148-179 are pending. Claims 11, 12, 32-34, 74, 81, 83-90, 95, 98-103, 105-114, 119-140, 157-161 and 171-177 are rejected. Claims 148-156, 162-170, 178 and 179 are allowed.

### ***Claim Rejections - 35 USC § 112***

2. Claim 111 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Line 13, it is not clear whether “a second intelligent agent” refers to the same second intelligent agent cited in line 10.

### ***Claim Rejections - 35 USC § 102***

3. Claims 74, 95, 98, 99, 101, 102, and 107 are rejected under 35 U.S.C. 102(e) as being anticipated by Gill et al. (US 5,984,178).

Claims 74, 95, 98, 99 and 101, Gill discloses, in Fig. 1, a method of servicing an electronic device (14) interconnected over a network that includes communication of servicing information (18) over the network to servicing personnel (22), where the communication is made to allow a service person (22) to decide whether or not to accept responsibility (as shown in step 24, a respond is sent from a servicer that includes that responsive messages have been received

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to acknowledge and close trouble tickets etc. it is inherent that the servicing personnel to decide whether or not to accept responsibility at the time of acknowledgement) for correcting a state condition that has occurred within the device (column 9, line 49-column 10, line 5; column 29, lines 45-65).

Regarding Claims 102, Gill discloses a system comprising a networked transaction terminal element (14), a central server (20) and two or more servicing persons' terminals (22) interconnected over a network (see fig. 1), in which one or more of the servicing persons' terminal (22) are notified in the event of an error condition within the transaction terminal element (18, 32; see fig. 3), and in which a serving person's estimate as to when the error condition is likely to be serviced is communicated to the central server (fig. 1 step 24, the notified servicer has responded; the respond is an information concerning how to correct the condition or **may also be other activates by servicer** (it is inherent that a service person estimate as to when the error condition is likely to be serviced) (column 9, line 64-column 10, line 5).

Regarding claim 107, Gill discloses, in fig. 1, a system comprising a networked transaction terminal element (14) a central server (20) and a servicing person's (22) interconnected over a network, in which the servicing person's terminal (22) is notified in the event of an error condition within the transaction terminal element, and in which the central server is notified when the servicing person has serviced the error condition (steps 24, 26, 28).

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4. Claims 81, 83-85, 106, 108-110, 113, and 114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond (US 6,505,177) in view of Gill et al (US 5,984,178).

Regarding claims 81, 83-85, 106, Drummond discloses a method of servicing an electronic device interconnected over a network that includes storing in the device a network address of an authorized service representative, to enable notification to be sent to the service representative in the event of a designated operating condition (**fault messages which indicate a need for servicing is directed to an address associated with an entity who can provide the type of servicing required/notify appropriate personnel**; col. 28, line 46-col.29, line 5).

Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages are sent to a selected address** whenever a particular condition or group of conditions exists. Referring to col. 28, lines 45-67, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may *direct fault messages to a fault handling system* (service provider).

Drummond does not expressly disclose notifying terminal element when servicing person accepts or fail to accept responsibility for servicing the error condition and servicing person has serviced the error condition and.

Gill teaches in fig. 1, a system comprising a networked transaction terminal element (14) a central server (20) and a servicing person (22) interconnected over a network. Gill teaches that the system receives a condition message from a banking machine, and notifies servicers. Step 24 as indicated in Fig. 1, include acknowledgement by a servicer that they received notice of the

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existence of a problem; they have arrived on site to begin correcting the problem as indicted at step 26; and notify the system that the problem has been corrected as indicated by step 28.

Since Drummond discloses that the transaction terminal sends a fault messages directly to service provider, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the transaction terminal element when a servicing person has accepts, not accept, and/or serviced the error condition, such as that suggested by Gill, to the system of Drummond. Doing so would allow the transaction terminal to be appropriately updated and to be ready for the next transaction.

Regarding claims 108, 109 and 114, Drummond discloses a method of servicing an electronic device interconnected over a network that includes storing in the device a network address of an authorized service representative, to enable notification to be sent to the service representative in the event of a designated operating condition (**fault messages which indicate a need for servicing is directed to an address associated with an entity who can provide the type of servicing required/notify appropriate personnel**; col. 28, line 46-col.29, line 5).

Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages are sent to a selected address** whenever a particular condition or group of conditions exists. Referring to col. 28, lines 45-67, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider).

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Drummond does not expressly disclose that the transaction terminal element launches a second intelligent agent program if the first one does not return within an allotted time period.

Gill teaches in fig. 1, a system comprising a networked transaction terminal element (14) a central server (20) and a servicing person (22) interconnected over a network. Gill teaches that the system receives a condition message from a banking machine, and notifies servicers. Further, Gill teaches that the system sends additional notification messages to the servicer (or to another servicer) if the servicer has not acknowledged a notification message within a selected time period.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that launches a second intelligent agent program if the first one does not return within an allotted time period to the method of Drummond, as taught by Gill in order to provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

Regarding claims 110 and 113, Drummond discloses a method of servicing an electronic device interconnected over a network that includes storing in the device a network address of an authorized service representative, to enable notification to be sent to the service representative in the event of a designated operating condition (**fault messages which indicate a need for servicing is directed to an address associated with an entity who can provide the type of servicing required/notify appropriate personnel**; col. 28, line 46-col.29, line 5). Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages are sent to a selected address**

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whenever a particular condition or group of conditions exists. Referring to col. 28, lines 45-67, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider).

Drummond does not expressly disclose notifying terminal element when servicing person has visited by a program and the associated service person accepts, rejects or fails to accept responsibility for servicing the error condition.

Gill teaches in fig. 1, a system comprising a networked transaction terminal element (14) a central server (20) and a servicing person (22) interconnected over a network. Gill teaches that the system receives a condition message from a banking machine, and notifies servicers. Step 24 as indicated in Fig. 1, include acknowledgement by a servicer that they received notice of the existence of a problem; they have arrived on site to begin correcting the problem as indicted at step 26; and notify the system that the problem has been corrected as indicated by step 28. Further, Gill teaches that the system sends additional notification messages to the servicer (or to another servicer) if the servicer has not acknowledged a notification message within a selected time period.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies a device when a servicing person has visited by the program and the associated service person accepts, rejects or fails to accept to the method of Drummond, as taught by Gill. Doing so would allow the transaction terminal to be appropriately updated and to be ready for the next transaction. Further, would allow the transaction terminal to



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send additional notification messages to the servicer (or to another servicer) if the servicer has not acknowledged or fails to accept.

5. Claims 32, 33, 122-124, 126, 127, 130, 132-140, 157, 158, 171, 172 and 176 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond in view of Cave (US 5,958,014).

Regarding claims 32 and 33, Drummond discloses that a transaction terminal element (an electronic device) (64) communicates through the Intranet with the central server (92). Either transaction terminal element or the central server may direct **fault messages, which indicate a need for other types of servicing** to a fault handling system (service provider). E-mail or similar messages are sent to selected address whenever a particular condition or group of condition exists. Alternatively, the selective dispatching of fault messages to **address in the intranet** may be accomplished by appropriately configuring device server 92 (central server). Further, Drummond discloses that ATM machine may be **instructed** to access servers for purposes of **downloading documents**, which include information such as **advertising, promotional material or other types of information** (column 31, lines 28-41).

However, Drummond does not expressly disclose sending a message to the electronic device when authorized service representative logs on to the network.

Cave teaches a system and method for establishing a data connection between a computer and **a live agent selected from an agent pool**. Fig. 5 shows a flow chart showing the logic followed during a typical agent **log on and places the agent on the available list**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the electronic device when an authorized service

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representative **logs on** to the network, such as that suggested by Cave, to the system of Drummond. The suggestion/motivation would have been that Drummond discloses that fault messages may be configured to send an e-mail or similar message to **a selected address** whenever a particular condition exist, therefore, “notifying the transaction terminal element at the time the service representative logs on” would provide an efficient and a fast method of connection between the terminal and available service representatives and would save time to access service provider address by being kept up-to-data about the available service provider.

Regarding claim **122**, Drummond discloses a method of servicing an electronic device interconnected over a network that includes storing in the device a network address of an authorized service representative, to enable notification to be sent to the service representative in the event of a designated operating condition (**fault messages which indicate a need for servicing is directed to an address associated with an entity who can provide the type of servicing required/notify appropriate personnel**; col. 28, line 46-col.29, line 5). Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages are sent to a selected address** whenever a particular condition or group of conditions exists (list of network addresses). Referring to col. 28, lines 45-67, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider).

Drummond does not expressly disclose when a servicing person's terminal logs onto the network, the log in process activates agent handler routine in the servicing person's terminal for receiving and processing intelligent agent programs launched onto the network by the transaction terminal element.

Cave teaches a system and method for establishing a real-time agent pool between computer systems. Fig. 5 shows the log on control that is exercised by a server (ACM) to effect calls on the Internet and to provide the Automatic Call Distribution function.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's system wherein a servicing person's terminal logs onto the network, the log in process activates agent handler routine in the servicing person's terminal for receiving and processing intelligent agent programs launched onto the network by the transaction terminal element, as taught by Cave. The suggestion/motivation would have been that Drummond discloses "fault or status messages are delivers to a service provider", therefore, combing the log in process with the delivering messages to the service provider would provide an efficient and a fast method of establishing a connection between the terminal and available service representatives.

Regarding claims 123, 124, 126, and 127, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92) (claimed transaction terminal element logs on to the network). Either transaction *terminal element or the central server may direct fault messages to a fault handling system* (service provider). Alternatively, the selective dispatching of fault messages to **address in the intranet** may be

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accomplished by appropriately configuring device server 92 (central server) (claimed the transaction terminal element is notified by the central server). Further, Drummond discloses that ATM machine may be **instructed** to access servers for purposes of **downloading documents**, which include information such as **advertising, promotional material or other types of information** (column 31, lines 28-41).

Drummond does not expressly disclose that the transaction terminal element is notified by a servicing person's terminal as to the network identity of a servicing person potentially available.

Cave teaches a system and method for establishing a data connection between a computer and **a live agent selected from an agent pool (list of available agent)**. As shown in Fig. 2, a customer (when transaction terminal element logs on to the network) selects "service agent" and agent queuing manager 11 that will connect the customer to the next available agent. Furthermore, fig. 4 shows that phone directory is accessed and shown on the user's PC, allow the user to select the person (potentially available for servicing) to which the user desires to talk.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the transaction terminal element as to the network identity of servicing persons potentially available, such as that suggested by cave, to the method of Drummond. The suggestion/motivation would have been that Drummond discloses that fault messages may be configured to send an e-mail or similar message to **a selected address** whenever a particular condition exist, therefore, "notifying the transaction terminal element at the time the service representative logs on" would provide an efficient and a fast method of

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connection between the terminal and available service representatives and would save time to access service provider address by being kept up-to-date about the available service provider.

Regarding claims **132-135**, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92) (claimed when the transaction terminal element logs on to the network). Either transaction terminal element or the central server may direct **fault messages, which indicate a need for other types of servicing** to a fault handling system (service provider) (it is inherent to store the address within the device to enable notification to be sent to the service representative, since the transaction terminal element or the central server direct fault messages to service provider). Alternatively, the selective dispatching of fault messages to **address in the intranet** may be accomplished by appropriately configuring device server 92 (central server). The server includes screening software 107. Screening software is operable to check address to which messages are being directed by the ATM and to selectively prevent the sending of messages to particular address (column 22, lines 46-52) (claimed the intelligent agent program being first routed to the central server where it is checked and authorized before being transmitted to the transaction terminal element). Further, Drummond discloses that ATM machine may be **instructed** to access servers for purposes of **downloading documents**, which include information such as **advertising, promotional material or other types of information** (claimed the central server launches an intelligent agent program to notify the transaction terminal element as to the network identity of servicing person) (column 31, lines 28-41).

However, Drummond does not expressly disclose launching an intelligent agent program to notify the transaction terminal element as to the network identity of servicing persons potentially available for servicing of the transaction terminal element when the transaction terminal element logs on.

Cave teaches a system and method for establishing a data connection between a computer and **a live agent selected from an agent pool**. Fig. 5 shows a flow chart showing the logic followed during a typical agent **log on and places the agent on the available list**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the transaction terminal element as to the network identity of servicing persons potentially available for servicing of the transaction terminal element when an authorized service representative **logs on to the network**, such as that suggested by Cave, to the system of Drummond. The suggestion/motivation would have been that Drummond discloses that fault messages may be configured to send an e-mail or similar message to **a selected address** whenever a particular condition exist, therefore, “notifying the transaction terminal element at the time the service representative logs on” would provide an efficient and a fast method of connection between the terminal and available service representatives.

Regarding claims **130 and 138-140**, Drummond does not expressly disclose when a servicing person’s terminal logs onto or off the network notify transaction terminal elements of identity of servicing persons potentially available.

Cave teaches a system and method for establishing a real-time agent pool between computer systems. Figs. 5 and 6 show the log on or off control that is exercised by a server

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(ACM) to effect calls on the Internet and to provide the Automatic Call Distribution function.

Furthermore, fig. 4 shows that phone directory is accessed and shown on the user's PC, allow the user to select the person (potentially available for servicing) to which the user desires to talk.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's system wherein a servicing person's terminal logs onto the network, notify transaction terminal elements of identity of servicing persons potentially available, as taught by Cave. The suggestion/motivation would have been that Drummond discloses **E-mail or similar messages are sent to a selected address** whenever a particular condition or group of conditions exists, therefore combining "the log onto or off process" with "the sending messages" would allow the transaction terminal elements to know which particular service provider is available.

Further, Drummond does not expressly disclose (claims 139, 140) an intelligent agent acquires a list of terminals to visit and visits the terminals in sequence.

However, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's apparatus to deliver a list of ATMs and to cause the monitor Agent to visit the ATMs on the list in sequence. The suggestion/motivation would have been that Drummond discloses pluralities of ATMs are connected to a computer system. Fig. 2 shows an ATM includes a plurality of transaction function devices 36 and device manager 68. The device manager manages the various devices 36 and controls their various states so as to be assured that they properly operate in sequence (see column 7). From each ATM, fault messages indicative of a need to replenish currency or supplies may be directed to an address in the intranet associated with an entity who can provide the type of servicing required or who has

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**responsibility** for replenishing supplies. This shows that a need to replenish currency or supplies may be needed at the same time, from a particular ATM or plurality of ATMs. Therefore, visiting the ATMs on the list in sequence would be beneficial to provide a communication by which the number of messages could be reduced and customer satisfaction improved.

Regarding claim 136, Drummond discloses all the claim limitations as stated above. Further, Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. Appropriate security measures should be taken in order to avoid unauthorized access to the server handling default or device messages (column 29, lines 45-59).

Drummond does not expressly disclose launching an intelligent agent program to notify the transaction terminal element change in the network identity of servicing persons potentially available for servicing of the transaction terminal element when the servicing person's terminal logs on or off the network.

Cave teaches a system and method for establishing a real-time agent pool between computer systems. Figs. 5 and 6 show means for verifying an agent during log on, adding the verified agent to the agent pool and allowing the agent to log off.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a system that notifies the transaction terminal potentially available of servicing persons, such as that suggested by Cave, to the system of Drummond. The suggestion/motivation would have been that Drummond discloses "unauthorized access to the server handling default or device messages, appropriate security measures should be taken" therefore, notifying the



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transaction terminal element the identity of servicing person's during log on, would maintains security and saves time to locate service providers by being kept up-to-date about available service provider.

Regarding claim 137, Drummond discloses all the claim limitations as stated above. Further, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider). Fault messages may be selectively directed based on the nature of the fault indicated to an address associated with an entity who can provide the type of servicing required (column 28, lines 54-62). Drummond does not expressly discloses that when a servicing person's terminal logs onto the network, establishes associated servicing details.

Cave teaches a system and method for establishing a real-time agent pool between computer systems. Figs. 5 and 6 show means for verifying an agent during log on, adding the verified agent to the agent pool and allowing the agent to log off.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that establishes associated servicing details when a servicing person's terminal logs onto the network, such as suggested by Cave, to the method of Drummond in order to direct fault messages to a particular service provider.

Regarding claims 157, 171 and 176, Drummond discloses a method of operating a server system and associated ATMs comprising:

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a) sending a first type of intelligent agent from a server to a group of ATMs, which agent obtains diagnostic information from the ATM (device server 92 includes a monitor software application which is operative to monitor device operation instruction; column 11, lines 11-27; column 12, lines 21-32);

b) sending a second type of intelligent agent from a server to a group of ATMs ((the HTTP server 90 may deliver documents (that includes services or other material) selectively to the ATMs)the JAVA applets and JAVA script are loaded from a central location providing selective software distribution in the ATMs which may also be used to tailor the ATM to its environment by causing it to access documents which include material intended to be useful in that location, (column 11, lines 11-27; in addition Drummond discloses that fault messages which indicate a need for servicing may be directed to an address associated with an entity who can provide the type of servicing required; this shows that the identities of service provider (technician) is known) and

c) sending a third type of intelligent agent from a malfunctioning ATM to a service technician (Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider)), wherein all intelligent agents share a common data format (TCP/IP) (column 28, lines 32-65).

Drummond does not expressly disclose which agent informs the ATMs of the identities of available service technicians.

Cave teaches a system and method for establishing a data connection between a computer and **a live agent selected from an agent pool**. Fig. 5 shows a flow chart showing the logic followed during a typical agent **log on and places the agent on the available list**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the transaction terminal element the identities of available for service technicians, such as that suggested by Cave, to the system of Drummond. The suggestion/motivation would have been that Drummond discloses that fault messages may be configured to send an e-mail or similar message to **a selected address** whenever a particular condition exist, therefore, “notifying the transaction terminal element the identities of available for service technicians” would provide an efficient and a fast method of connection between the terminal and available service representatives.

Regarding claims 158, 172, Drummond discloses a method wherein the first type of agent returns to the server, and delivers the diagnostic information to the server upon return (HTTP messages are sent to the mini-HTTP server (which reside in device server 92) to correct problems (messages may include running diagnostic tests...); column 12, lines 33-45; column 29, lines 5-59).

6. Claims 86-90, 103, 105, 111 and 112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gill in view of Lesaint et al. (US 6,578,005).

Regarding claim 86, Gill discloses a networked transaction terminal element (14) and two or more servicing persons' terminals (22) interconnected over a network (see fig. 1), the

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transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminal in the event of an error condition within the transaction terminal element (column 9, lines 19-47), and in which the intelligent agent program is transmitted to a particular servicing person's terminal (column 29, lines 17-32).

Gill does not expressly disclose that the intelligent agent program is transmitted to a particular servicing person's terminal as determined by a prioritized list of terminal to visit maintained by the program.

Lesaint teaches that a list of technicians who can do a particular task will be stored into a priority order. A scheduler attempts to schedule a task to a first technician in the list. If the task cannot be added to the end of the first technician's tour, the process is repeated for other technicians (column 13, lines 10-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a scheduling system, such as that suggested by Lesaint, to the system of Gill. Doing so would allow the system to allocate a particular servicing person's terminal on a shorter time scale.

Regarding claims 87-90, Gill discloses, in fig. 1, a system comprising a networked transaction terminal element (14, 16, 20) and two or more servicing persons' terminals (22) interconnected over a network, in which the transaction terminal element launches an intelligent agent program (18) onto the network to notify one or more of the servicing persons' (22) in the event of an error condition within the transaction terminal element and in which the intelligent agent program is programmed to visit the various servicing persons' terminals until within an

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allotted period of time one of the servicing persons visited accepts responsibility for servicing the error condition that has occurred (column 5, lines 34-44; column 12, lines 6-18)

Gill does not expressly disclose that the intelligent agent program is programmed to visit the various servicing persons' terminals in succession.

Lesaint teaches that a list of technicians who can do a particular task will be stored into a priority order. A scheduler attempts to schedule a task to a first technician in the list. If the task cannot be added to the end of the first technician's tour, the process is repeated for other technicians (column 13, lines 10-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a scheduling system, such as that suggested by Lesaint, to the system of Gill. Doing so would allow the system to allocate a particular servicing person's terminal on a shorter time scale.

Regarding claims 103 and 105, Gill discloses a system comprising a networked transaction terminal element (14), a central server (20) and two or more servicing persons' terminals (22) interconnected over a network (see fig. 1), in which one or more of the servicing persons' terminal (22) are notified in the event of an error condition within the transaction terminal element (18, 32; see fig. 3), and in which a serving person's estimate as to when the error condition is likely to be serviced is communicated to the central server (fig. 1 step 24, the notified servicer has responded; the respond is an information concerning how to correct the condition or may also be other activates by servicer; column 9, line 64-column 10, line 5). Further, Gill discloses that the schedule includes other actions which are to be taken at times

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after giving the initial notification, depending on conditions which exist or which have been notified to the MMR as existing at that time (column 31, line 60-column 32, line 7).

Gill does not expressly disclose that a servicing person's estimate as to when the error condition is likely to be serviced and to allow proximity or availability based **prioritization for service scheduling**.

Lesaint teaches a method that stores an initial schedule based on predicated availability of resources task, priorities, and suitability of tasks to resources (column 5, line 57-column 6, line 10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings from Lesaint of allowing proximity or availability based prioritization for service scheduling in the method disclosed by Gill. Doing so would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

Regarding claims 111 and 112, Gill discloses a system comprising a networked transaction terminal element (14, 16, 20) and two or more servicing persons' terminals (22) interconnected over a network, in which the transaction terminal element launches an intelligent agent program (18) onto the network to notify one or more of the servicing persons' (22) in the event of an error condition within the transaction terminal element, where the servicing persons' terminals are scheduled to be visited by the program in a preset order, and in which the transaction terminal element launches a second intelligent agent program if the first one does not return within an allotted time period (column 5, lines 34-44; column 12, lines 6-18).

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Gill does not disclose that the second intelligent agent program is programmed to visit the servicing persons' terminals in a different preset order.

Lesaint teaches that a list of technicians who can do a particular task will be stored into a priority order. A scheduler attempts to schedule a task to a first technician in the list. If the task cannot be added to the end of the first technician's tour, the process is repeated for other technicians (column 13, lines 10-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a scheduling system, such as that suggested by Lesaint, to the system of Gill. Doing so would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

7. Claims 34, 100, 125, 129 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond in view of Smith (US 6,128,376).

Regarding claim 34, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct **fault messages, which indicate a need for other types of servicing** to a fault handling system (service provider) (claimed including storing in the device a network address of an authorized service representative, to enable notification to be sent to the service representative in the event of a designated operating condition).

Drummond does not expressly disclose informing the device when the representative becomes unavailable to perform required services.

Smith teaches that customers are notified at the time of the service provider selection has changed or the type of service has been changed or is about to be changed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the terminal element in the event of a change in scheduled servicing of the terminal element, such as that suggested by Smith, to the method of Drummond. Doing so would give an opportunity to the customer the ability to cancel or validate the service.

Regarding claim 100, Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages are sent to a selected address** whenever a particular condition or group of conditions exists. Referring to col. 28, lines 45-67, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may *direct fault messages to a fault handling system* (service provider).

Drummond does not expressly disclose that terminal element is notified in the event of a change in scheduled servicing of the terminal element.

Smith teaches that customers are notified at the time of the service provider selection has changed or the type of service has been changed or is about to be changed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the terminal element in the event of a change in scheduled servicing of the terminal element, such as that suggested by Smith, to the method of



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Drummond. Doing so would give an opportunity to the customer the ability to cancel or validate the service.

Regarding claims 125 and 129, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92) (claimed when the transaction terminal element logs on to the network). Either transaction terminal element or the central server may direct **fault messages, which indicate a need for other types of servicing** to a fault handling system (service provider). Further, Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages are sent to a selected address** whenever a particular condition or group of conditions exists.

Drummond does not expressly disclose that terminal element is notified in the event of a change in scheduled servicing of the terminal element.

Smith teaches that customers are notified at the time of the service provider selection has changed or the type of service has been changed or is about to be changed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the terminal element in the event of a change in scheduled servicing of the terminal element, such as that suggested by Smith, to the method of Drummond. Doing so would give an opportunity to the customer the ability to cancel or validate the service.

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8. Claims 11, 128 and 131 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond in view of Cave and Lesaint.

Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92) (claimed when the transaction terminal element logs on to the network). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider). Alternatively, the selective dispatching of fault messages to **address in the intranet** may be accomplished by appropriately configuring device server 92 (central server). Further, Drummond discloses that ATM machine may be **instructed** to access servers for purposes of **downloading documents**, which include information such as **advertising, promotional material or other types of information** (column 31, lines 28-41).

However, Drummond does not expressly disclose launching an intelligent agent program to notify the transaction terminal element as to the network identity of servicing persons potentially available for servicing of the transaction terminal element when the transaction terminal element logs on.

Cave teaches a system and method for establishing a data connection between a computer and **a live agent selected from an agent pool**. Fig. 5 shows a flow chart showing the logic followed during a typical agent **log on and places the agent on the available list**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies the transaction terminal element as to the network identity of servicing persons potentially available for servicing of the transaction terminal element when an authorized service representative **logs on to the network**, such as that suggested

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by Cave, to the system of Drummond. The suggestion/motivation would have been that Drummond discloses that fault messages may be configured to send an e-mail or similar message to **a selected address** whenever a particular condition exist, therefore, “notifying the transaction terminal element at the time the service representative logs on” would provide an efficient and a fast method of connection between the terminal and available service representatives

Further, Drummond in view of Cave does not expressly disclose that a servicing person’s estimate as to when the error condition is likely to be serviced and to allow proximity or availability based prioritization for service scheduling.

Lesaint teaches a method that stores an initial schedule based on predicated availability of resources task, priorities, and suitability of tasks to resources (column 5, line 57-column 6, line 10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings from Lesaint of estimating when the error condition is likely to be serviced in the method disclosed by Drummond in view of Cave. Doing so would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

9. Claims 119-121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond et al. in view of Canada et al. (US 5,870,699).

Drummond discloses all the claim limitations as stated above. Further, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92) regarding the condition exist at the transaction terminal. The selective dispatching of fault messages to address in the intranet may be accomplished by appropriately

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configuring device server 92 (central server) (column 28, lines 35-67). Further, Drummond discloses that server is configured to receive device status messages and to produce HTTP records including HTML documents in response thereto, which provide data representative of device status to a diagnostic device 10 such as a hand held computer terminal. Drummond does not expressly disclose that servicing requirements are determined based on prediction made by the central server.

Canada teaches that hand held data collector and analyzer systems are typically used to collect data from machines for use in predicting maintenance requirements.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's apparatus to utilize a method where the servicing requirements is based on prediction made by the central server, as taught by Canada. The motivation is possible to obtain information for early diagnosis of impending malfunctions. Furthermore, it will prevent machine breakdowns and increase reliability

10. Claims 159-161, 173-175 and 177 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond in view of Cave as applied to claims 157, 171 and 176 above, and further in view of Lesaint.

Drummond discloses all the claim limitations as stated above. Further, Drummond discloses at and ATM, detecting an error condition (column 28, lines 35-44); examining the abilities of the human service technicians and selecting a group of technicians to handle the error condition (fault messages may be selectively directed based on the nature of the fault indicated; column 28, lines 51-55); and delivering to an alert intelligent agent addresses of the group of

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technicians, and causing the Alert Agent to contact the technicians (column 28, lines 51-62).

However, Drummond does not expressly disclose ranking the technicians in the group and contact the technicians in the group in rank order, until a technician is found who makes a specified response.

Lesaint teaches that a list of technicians who can do a particular task will be stored into a priority order. A scheduler attempts to schedule a task to a first technician in the list. If the task cannot be added to the end of the first technician's tour, the process is repeated for other technicians (column 13, lines 10-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a scheduling system, such as that suggested by Lesaint, to the system of Drummond. Doing so would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond in view of Lesaint and Cave as applied to claim 11 above, and further in view of Gill et al.

Drummond in view of Lesaint and Cave discloses all the claim limitations as stated above, except for the intelligent agent alert program within a predetermined time period.

Gill teaches that the system receives a condition message from a banking machine, and notifies servicers. Further, Gill teaches that the system sends additional notification messages to the servicer (or to another servicer) if the servicer has not acknowledged a notification message within a selected time period.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that launches a second intelligent agent program if the first one does not return within an allotted time period to the method of Drummond in view of Lesaint and Cave, as taught by Gill in order to provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

***Allowable Subject Matter***

12. Claims 148-154, 162-170, 178 and 179 are allowed.

***Response to Arguments***

13. Applicant's arguments with respect to claims 11, 12, 32-34, 74, 81, 83-90, 95, 98-103, 105-114, 119-140, and 148-179 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

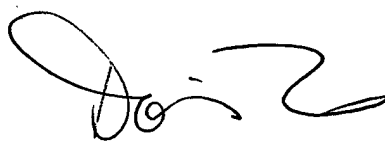
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST  
April 14, 2006

A handwritten signature in black ink, appearing to read 'Doris H. To', with a stylized flourish at the end.

**DORIS H. TO**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**